## 217/782-2113

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

## PERMITTEE

Genesis Press, Inc. Attn: Kevin Bauman 1270 Ardmore Avenue Itasca, Illinois 60143

Application No.: 02010032 I.D. No.: 043450AAG

Applicant's Designation: Date Received: December 27, 2005

Subject: Lithographic Printing Facility

Date Issued: June 8, 2006 Expiration Date: February 18, 2008

Location: 1270 Ardmore Avenue, Itasca

This permit is hereby granted to the above-designated Permittee to OPERATE one web and eight sheet-fed non-heatset offset lithographic printing presses/coaters pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for volatile organic material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for totaled HAPs). As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit.
  - ii. To limit the emissions of VOM from the emission units constructed between November 15, 1992 and June 15, 2005 (the period during which the Chicago area was classified as severe nonattainment for ozone) without construction permit(s) to less than New Source Review major source threshold 25 tons/year established by 35 Ill. Adm. Code 203.206(b). As a result, the source is excluded from the requirement to undergo the New Source Review procedure.
  - iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to the initial issuance of a FESOP to this source, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit issued for this location.

- 2. The lithographic printing presses are subject to the emission limitations and control requirements of 35 Ill. Adm. Code 218.407 and shall comply with the following requirements:
  - a. Non-heatset web press:

The VOM content of the as-applied fountain solution is 5 percent or less, by volume, and the as-applied fountain solution contains no alcohol.

b. Non-heatset sheet-fed presses:

The VOM content in the as-applied fountain solution is 5 percent or less, by volume.

- c. Any lithographic printing presses:
  - i. The VOM content of the as-used cleaning solution is less than or equal to 30 percent, by weight; or
  - ii. The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F).
- d. The VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line are kept, stored or disposed of in any manner other than in closed containers.
- 3. The paper coating operations performed on the printing presses are subject to emission limitations of 35 Ill. Adm. Code Part 218, Subpart F. The VOM content of the coatings, as applied, on the printing presses shall not exceed 2.3 lbs/gallon excluding water and any compounds which are specifically exempted from the definition of VOM.
- 4. The VOM emissions from printing and coating operations shall not exceed 2.0 tons/month and 19.1 tons/year. The VOM emissions shall be calculated using the following equations:

$$E = \sum (I_m \times V_{Im} \times 0.05) + \sum (S_n \times V_{Sn})$$

Where:

E - VOM emissions (ton);

 $I_m$  - Ink usage (ton);

 $V_{Im}$  - VOM content of ink (wt. fraction);

 $S_{n}$  - Other VOM-containing materials used (fountain and cleaning solutions and coatings);

 $V_{Sn}$  - VOM content of other materials (wt. fraction).

These limits are based on the maximum production rate and 95% ink's VOM retention. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 5. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
- 6a. The Permittee shall maintain daily records of the following items pursuant to 35 Ill. Adm. Code 218.411(c) and (d):
  - i. The name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing line(s) or centralized reservoir using such batch of fountain solution, and the applicable VOM content limitation for the batch;
  - ii. Date and time of preparation and each subsequent modification of the batch of fountain solution;
  - iii. Volume and VOM content of each component used in, or subsequently added to, the fountain solution batch; and
  - iv. Calculated VOM content of the as-applied fountain solution; or
  - v. For a fountain solution to which VOM is not added automatically to take a sample of the as-applied fountain solution from the fountain tray or reservoir, as applicable, each time a fresh batch of fountain solution is prepared or each time VOM is added to an existing batch of fountain solution in the fountain tray or reservoir, and shall determine compliance with the VOM content limitation of the as-applied fountain solution by using one of the following options:
    - A. With a refractometer or hydrometer with a visual, analog, or digital readout and with an accuracy of 0.5 percent. The refractometer or hydrometer must be calibrated with a standard solution for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications, against measurements performed to determine compliance. The refractometer or hydrometer must be corrected for temperature at least once per 8-hour shift or once per batch of fountain solution prepared or modified, whichever is longer; or

- B. With a conductivity meter if it is demonstrated that a refractometer and hydrometer cannot distinguish between compliant and noncompliant fountain solution for the type and amount of VOM in the fountain solution. A source may use a conductivity meter if it demonstrates that both hydrometers and refractometers fail to provide significantly different measurements for standard solutions containing 95 percent, 100 percent and 105 percent of the applicable VOM content limit. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water. A standard solution shall be used to calibrate the conductivity meter for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications;
- vi. For fountain solutions to which VOM is added at the source with automatic feed equipment, determine the VOM content of the asapplied fountain solution based on the setting of the automatic feed equipment which makes additions of VOM up to a pre-set level. The equipment used to make automatic additions must be installed, calibrated, operated and maintained in accordance with manufacturer's specifications;
- b. For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with Section 218.407(a)(4)(B):
  - i. The name and identification of each cleaning solution;
  - ii. Date and time of preparation, and each subsequent modification, of the batch of cleaning solution;
  - iii. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 218.409(e).
- 7. The Permittee shall maintain monthly records of the following items:
  - a. Names and amounts of lithographic inks, fountain solutions, coatings and clean-up solvents used (ton/mo, ton/year);
  - b. VOM and HAP content of materials in item (a) (wt%); and
  - c. Monthly and annual VOM and HAP emissions with supporting calculations (ton/mo, ton/yr).
- 8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours

so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.

- 9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 10. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Illinois EPA Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

<u>and</u> one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Illinois EPA Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

It should be noted that this permit has been revised to include operations of two sheet-fed printing presses relocated from another facility's location comprising a single source with this one and no longer include operations of one web heatset and one sheet-fed lithographic printing presses.

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

DES:VJB:psj

cc: Illinois EPA, FOS Region 1 Lotus Notes

## Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the lithographic printing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 25 tons/year for volatile organic material (VOM), 10 tons per year for a single HAP, and 25 tons per year for totaled HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program and New Source Review. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

	$E\;M\;I\;S\;S\;I\;O\;N\;S\;\;\;(Tons/Year)$		
Process	MOV	Single HAP	Total HAPs
Lithographic Printing Operations	19.1	< 10	< 25

VJB:psj